

State of Montana DEPARTMENT OF ENVIRONMENTAL QUALITY Environmental Management Bureau PO Box 200901

Helena, Montana 59620-0901 Phone: (406) 444-4953

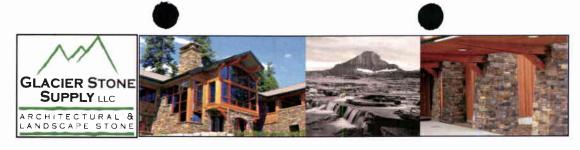
Pursuant to the Montana Metal Mine Reclamation Act (Title 82, Chapter 4, Part 3 MCA)

INSTRUCTIONS: See Operating Permit Rules and Regulations and General Quarry Plan of Operations Bureau

JAN 17 2017

Montana DEQ

Following application submittal, the initial completeness review will be application is consistent with the General Quarry Supplemental EA, r	e done within 60 d no furhter environn	ays. Subsequent reviews nental analyses will be perf	will be completed with	in 30 days. If thi
NAME AND ADDRESS OF OPERATOR (Corporation or other business entity: Give names and addresses of principal officers, partners.	SIZE AND LEGAL DESCIPTION OF PERMITTED AREA Location:			
agents, etc.) AND SEE ATTACKED GLAGIEZ STONE SWALL, LLC 955 WHITE FIGH SIGNE RD KALIGHEL MT 59901	Section 04	TZN Range		County
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Nanke Rock be Permitted	Proposed Acre be Disturbed	Şta	Expected Dates	npletion
FORMATIONS 2119	~ 30 AS	Les 440	x1/2017 1/3	#2027
In the following sections, refer to maps and photos. Use attachments if necessary. (Please contact Department on questions concerning application requirements.)				
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RECLAMATION PLAN FOR ACRES TO BE DISTUR	BED COVERE	ED BY THIS APPLICA	TION FOR PERM	IIT.
SEE ATTACKED			53	
DESCRIBE PLAN OF QUARRYING, PROVIDING FO DISTURBANCES.	OR COMPLET	ION OF QUARRYING	AND ASSOCIAT	ED LAND
See AMACHES				
THIS APPLICATION MUST BE ACCOMPANIED BY:	Signature of	Applicant)	
Fee of \$500.00. Map showing: Permit Area; specific area to	Title Pasi		ے	
be quarried; boundaries of land which will be disturbed; topographic detail; location	Date c/rol	7		
and names of all lakes, streams, roads, railroads, and utility lines on or immediately adjacent to the area;	FEE RECEIVE D	PERMIT ISSUED	Application Retu (Statement Attac	



PLAN OF OPERATIONS

INTRODUCTION

Glacier Stone Supply is a supplier of architectural and landscape stone. Founded in 2003, Glacier Stone Supply is now one of the largest architectural and landscape stone dealer's in Montana. Glacier Stone Supply owns and operates its own rock product sites; utilizes private leased locations; extracts rock from leased Weyerhaeuser mine sites; and also brokers stone from private and retail suppliers. Glacier Stone Supply has been seeing an increasing demand for rock products in western Montana. The rock is being used for a variety of purposes and is being shipped throughout most of the western U.S, Canada & Europe.

Glacier Stone Supply is seeking an operating permit from the Montana Department of Environmental Quality (DEQ) for an operating permit to a privately owned, leased rock mine site that would provide flexibility to meet changing demands for rock products. Glacier Stone Supply proposes a 25-year permit life. During the life of the permit, Glacier Stone Supply predicts that the sites contracted will total approximately 119 permitted acres. Within these 119 permitted acres, approximately 35 acres would be disturbed over the life of the permit. Reclamation on each site would be completed as concurrently with rock product activities as possible. The maximum unreclaimed total disturbance at any one time for all sites would be less than 10 acres. Most unreclaimed areas would be held to five acres or less. Other acres would be reclaimed as rock product operations end.

Exhibit A, showing the current sites proposed to be covered by this operating permit; Appendix A including Individual Site Data Summary, property owners within a ½ mile radius of the sites including Site Baseline Description Pages describing each individual site proposed in the operating permit are attached.

Glacier Stone Supply is proposing to convert this existing operation from the current 2 SMES permits to a single General Operating Quarry Supplemental Programmatic Environmental Assessment (EA) due to the overlapping area of the two existing SMES permitted mines. The Supplemental Programmatic EA analyzed impacts created by sites that could keep acres disturbed and unreclaimed at any one time to five acres or less. Impacts of sites that exceed the five acre limitations will need a Supplemental EA that will be prepared by the DEQ for public review. Even though some of the sites may exceed 5 acres disturbed and un-reclaimed at any one time, there would be no other impacts other than size of the disturbance area over the impacts analyzed in the Supplemental Programmatic EA. Glacier Stone Supply will minimize the number of unreclaimed acres over the life of the permit.

Operationally, Glacier Stone Supply would contact the DEQ when a new site is proposed for inclusion in the permit. DEQ would inspect the site and ensure that it meets the requirements of their permit. In each annual report, Glacier Stone Supply would provide updated exhibits for the Operating Permit showing how many sites and acres have been disturbed and the old and new sites which have been reclaimed, removed or disturbed and added to the permit over the past year.

The General Quarry Supplemental Programmatic EA and Plan of Operations application form may be used to permit a rock or stone quarry or collection area if:

- total disturbed ground would not be more than 5 acres disturbed and un-reclaimed at any one time (without a supplemental EA),
- there would be no impact to any wetland, surface or ground water,
- there would be no constructed impoundments or reservoirs used in the operation,
- there would be no potential to produce any acid or other pollutive drainage from the site,
- there would be no impact to threatened or endangered species, and
- there would be no impact to significant historic or archeological features.

Some physical, biological, visual and human environment impacts would result from these disturbances. However, Glacier Stone Supply believes the overall environmental impacts of these disturbances would be minimal. In addition, Glacier Stone Supply believes the socio-economic impacts resulting from the quarries will benefit the economy of these areas in Montana. Currently, Glacier Stone Supply employs 40 - 100 people.

SECTION I - CORPORATE INFORMATION

1. If the applicant is a corporation or other business entity, list the name and address of officers, directors, owners of 10% or more of any class of voting stock, partners, and the like and its registered agent for service of process:

Dave Wilkins Owner 1712 Carnegie Way El Dorado Hills, CA 95762

Tony Kavanagh Owner 185 Legend Trail Kalispell, MT 59901

2. List the names and addresses of the owners of record and any purchasers under contract for deed of the surface of the land within the permit area and the owners of record and any purchasers for deed of all land within one half mile of any part of the permit area:

Glacier Stone Supply is proposing two quarry locations. Site-specific legal descriptions and land ownership within ½ mile are shown on the site-specific exhibits in Appendix A and as listed in Appendix B, Adjacent Ownership Spreadsheet. Exhibit A and Appendix A will be updated annually to show which sites have been added and which sites have been reclaimed, and have had bond released and been deleted during the previous operating season. Site-specific land ownership information will be updated in Appendix B, as well.

3. List the names and addresses of the present owners of record and any purchasers under contracts for deed of all minerals in the land within the permit area:

In Flathead County, Glacier Stone Supply leases the Canyon Creek and Glacier Mountain quarries from William Jarvis.

4. Provide the source of the applicant's legal right to quarry the mineral on the land affected by the permit:

See section I.3 above:

5. Certify that the applicant is not currently in violation in this state of any law, rule, or regulation of this state or of the United States pertaining to air quality, water quality, or mined land reclamation or if the applicant is a partnership, corporation, or other business association, certify that any partners, officers, directors, owners of 10% or more of any class of voting stock, and business association members, are not currently in violation in this state of any law, rule, or regulation of this state or of the United States pertaining to air quality, water quality, or mined land reclamation:

The owners of Glacier Stone Supply are not in violation of any law in Montana or the United States, pertaining to air quality, water quality, or mined land reclamation.

SECTION II – PRE-QUARRY BASELINE

1. Location and Topography. Provide a map showing the location of the proposed quarry, the specific area to be quarried and the boundaries of land that will be disturbed, sufficient topographic detail to show the topography of the site, the location and names of streams, roads, railroads, and utility lines on or immediately adjacent to the area, and the location of proposed access roads to be built.

Access to all sites would be by existing roads, "Access Roads". The main access route to each site is shown in Appendix A. Within each site there may be quarry development roads to access rock within the disturbance area. The access roads would remain unreclaimed for future access purposes. Most of the quarry development roads would be recontoured and reclaimed upon completion. Some roads would be left for the post mine use as shown in Appendix A. Access roads that would stay at closure and existing or conceptual quarry development roads that would be reclaimed at closure are shown on the individual site maps in Appendix A. The quarry development roads would change over time and would be updated in the annual reports. Refer to the individual site maps that are attached

2. Present Land Use and Past Quarrying Disturbance. Describe the present land use and any past quarrying disturbance within and near the proposed permit area:

The Flathead County rock product site within the proposed permit area has been logged in the past, have had limited livestock grazing and provide recreational opportunities through past Plum Creek / Weyerhaeuser openings. Please refer to individual baseline site mapping for disturbance sites.

3. Water Wells. Give the location, total depth, and use of any water well in and within 1000 feet of the permit area:

The site-specific maps show if any water wells exist within 1,000 feet of any of the proposed sites in this operating permit. No water would be used at any sites except for dust control or rock drilling, if necessary. To confirm the existence of any potential water well, an on-site examination would be performed or the DNRC water well database will be reviewed (http://nris.state.mt.us/interactive.html)

4. Water Table. Give the estimated seasonal high and low table depths for the area to be quarried, and the maximum depth of the quarry:

Refer to the individual site maps that are attached in Appendix A. Glacier Stone Supply will not quarry below the water table.

5. Surface Water. Show the location on a map and provide a description, and use of any surface water in and within 100' of the permit area:

For rock recovery under the operating permit, the rock would be obtained from a dry site. Surface waters would be 100 feet or more from the site and the water table would not be intercepted by any surface activities. Similarly, no riparian areas or wetlands would be disturbed as a result of rock product operations under the operating permit. Due to the distance from water, no fisheries would be present and the probability for the occurrence of amphibians would be limited.

For sites where the permit area is close to surface water, Glacier Stone Supply will list the implemented Best Management Practices (BMP's) and compliance with Streamside Management Zone (SMZ) requirements on the individual site maps and narrative sheets in Appendix A.

6. Soil Material. Provide a general description of the soil and overburden types and thickness in the area to be quarried:

Soil development may be highly variable but may be expected to be shallow or non-existent over rock on the proposed site. Extent of soil development would not be a criterion of permit approval. In those instances, when substantial site disturbance would be required, soils would be salvaged and stockpiled.

Long-term soil stockpiles would be revegetated with an interim seed mix to minimize dust, erosion and weed establishment on the Flathead County sites.

7. Vegetation. Describe the dominant vegetation within the permit area and note the occurrence of any noxious weeds:

The lands in Flathead County are owned by Glacier Stone Supply, and have been forested and are being managed for rock products and other subsequent development. The major forest types include Douglas-Fir, Ponderosa Pine, Lodge-pole Pine, Western Larch, and Engelmann Spruce. Other land types include lands dominated by grasses, shrubs, or rocky soils. Noxious weeds are present at most sites, typically invading through roads. Glacier Stone Supply has an approved noxious weed management plan from Plum Creek / Weyerhaeuser to maintain and control weed populations.

Glacier Stone Supply queried the Montana Natural Heritage Program's sensitive plant species database to locate federally endangered and threatened plant species (T&E) and globally critically imperiled (G1) and globally imperiled (G2) plant species on company lands. The G1 and G2 species ranking describes plant species that are critically imperiled or imperiled because of extreme rarity or because of some factor(s) of its biology making it especially vulnerable to extinction. If a sensitive plant species is present, Glacier Stone Supply would discuss potential mitigation plans with the DEQ.

No T&E or G1/G2 sensitive plant species have been identified to date at any of the permit rock product sites (MT Natural Heritage Database 2005) (see Appendix C).

Reclamation at quarry sites would include returning stockpiled native topsoil over disturbed areas to facilitate revegetation. Native topsoil will contain seed banks of native species and soil characteristics of the areas. Reclamation at rock product sites would include recontouring of the disturbed areas including quarry development roads, returning stockpiled soil over non-rock covered areas to facilitate revegetation, and reseeding.

8. Wildlife. Describe any significant seasonal or year-round use by wildlife in and within 1,000 feet of the permit area:

Rock-dominated habitats are abundant in Flathead County due to the mountainous terrain, geological history, and glaciation. Based on field visits, rock-dominated areas that have existing rock product sites or are planned for development into rock product sites do not represent unique habitat features compared to other surrounding rock features.

Glacier Stone Supply queried the Montana Natural Heritage Program's sensitive wildlife species database to locate federally endangered and threatened wildlife species (T&E) and globally critically imperiled (G1) and globally imperiled (G2) wildlife species on company lands. If a sensitive species is present, Glacier Stone Supply would discuss potential mitigation plans with the DEQ.

Currently, federally listed animal species near Glacier Stone Supply leases in Flathead County include the grizzly bear, Canada lynx, gray wolf, bald eagle, and bull trout.

None of the federally listed wildlife species (T&E) are known to exist at any of the proposed

quarry sites (MT Natural Heritage Program 2005) (see Appendix C). Although some of these species like grizzly bears or Canada lynx may use areas with rock features, none of these federally listed species of concern are known to depend on specific rock habitats or are obligate users of this habitat type. No other quarry sites were found to contain any G1 for G2 species. In addition, Glacier Stone Supply has access to internet sites to access information on wildlife, endangered species and other information. http://nris.state.mt.us./interactive.html)

If a federally listed T&E species is located at a specific quarry site and would be impacted by the quarry operation and/or development, the General Quarry Supplemental Programmatic EA would no longer apply. Development of the individual site would cease until an individual operating permit could be applied for by the operator and a supplemental environmental analysis could be completed and mitigation measures developed as needed.

In Flathead County, Glacier Stone Supply will reclaim most areas to approximate adjacent similarly functioning rock habitats.

In addition, several mitigation measures will be implemented during rock product development that will minimize the effects to wildlife using the area. These include:

- minimizing road building and landings at the site;
- retaining large legacy wildlife trees, snags, and down logs at the site;
- retaining topsoil for revegetation purposes during reclamation;
- maintaining some exposed surface rock after reclamation as rocky habitat;
- limiting total disturbed area by implementing concurrent reclamation of areas no longer needed for site operation.

<u>Ungulate winter ranges</u>. The Flathead County sites within the permit are mountainous and are generally not located within prime ungulate winter ranges. The sites within the permit are outside of mapped Montana Department of Fish, Wildlife, and Parks ungulate winter ranges. Activities at these small-scale, dispersed rock product sites are unlikely to impact ungulate winter ranges over the long-term. If a site is on a winter range and wildlife is impacted by operations, Glacier Stone Supply and DEQ would consider seasonal operating restrictions, if necessary.

<u>Landscape analysis</u>. Rock outcrops and talus slopes are widely-distributed in Flathead County and sites within the permit are not the only rock features in the local area surrounding the site; therefore, impacts to wildlife, using outcrops and talus within the permit, would be limited.

9. Geology.

Rock quarried under this plan would consist of various rock types and mineralogies. The rock may be found at or near the surface, such as talus, or in-place such as bedded metasediments, sandstone, schist, shale, limestone, basalt, rhyolite, marble, etc. It may be covered by overburden, or exposed as outcrops or scattered rock lying on the earth's surface.

The rock or resulting waste has no potential for causing acid rock drainage.

The rock being quarried in Flathead County is non-acid producing formations of the Belt Supergroup and Claggett shale formation. Each site has been evaluated for visible sulfides, iron staining and other effects of chemical weathering on the rocks for the past and present potential for acid generation. If any rock observed appeared to be potentially problematic, it would be sampled for its potential to produce pollutive drainage. If rock were sampled at any site, the data would be provided in the individual site narrative sheets. Each new site under the plan would be evaluated in a similar fashion.

10. Additional Information. Describe any characteristics or circumstances unique to the site:

Refer to the individual site maps in Appendix A for more detail regarding unique characteristics.

SECTION III - OPERATING PLAN

1. Soil Material Handling. Operator will:

- a. Salvage at least 6" of soil from facility level areas, if available: (facility level areas include mineral stockpile, processing and staging areas):
 - Glacier Stone Supply commits to this requirement. Refer to the individual site maps, attached as Appendix A, for more detail.
- b. Salvage all soils and overburden from, and at least ten feet ahead of, quarry areas: (quarry areas include areas to be quarried as well as areas for waste rock disposal):
 - Glacier Stone Supply commits to this requirement. Refer to the individual site maps, attached as Appendix A, for more detail.
- c. Handle soil and overburden separately and haul these materials to areas prepared for resoiling or stockpile them separately where they will not be disturbed, contaminated, or lost to erosion:
 - Glacier Stone Supply commits to this requirement. Refer to the individual site maps, attached as Appendix A, for more detail.
- d. Shape and seed any soil or overburden stockpile that will remain undisturbed for more than one year:
 - Glacier Stone Supply commits to this requirement. Refer to the individual site maps, attached as Appendix A, for more detail.
- e. In the case of reclamation to a use that will not require a vegetative cover, retain all soil on site in an accessible location until the alternate reclamation is assured:

Glacier Stone Supply commits to this requirement. Refer to the individual site maps, attached as Appendix A, for more detail.

2. Quarrying. Indicate the material to be quarried and describe the quarry method, showing location of the proposed pit, stockpiles, roads, and other facilities on a map.

A new quarry would be opened or an existing site reopened by removing vegetation, stripping and stockpiling soil for future reclamation use, and removing overburden or waste rock to access the desired rock materials. Generally, the materials to be quarried are rock outcrops and talus slopes. Depending on the product being produced, rock may be removed by various methods from 1) hand picking, 2) drilling and blasting followed by excavation and hauling, 3) ripping with a bulldozer or excavator followed by removal, or 4) drilling and sawing with diamond saws and splitting blocks followed by removal. If blasting were to be used, Glacier Stone Supply would comply with provisions of Section 82-4-356, MCA, and ARM 17.24.157-159.

Rock may be sorted, stockpiled, and collected on sites, prior to removal. Occasionally, some splitting / breaking may be done and rock crushing or tumbling for decorative uses or for producing aggregates may occur. An air quality permit may be required for crushing operations and would be applied for on a site-specific basis. The materials are accessed by using existing roads or by building new access and quarry development roads with excavators or dozers. Soils if available, especially in the level facility areas, would be pushed into a pile and seeded until needed at closure for reclamation.

Operators would use a variety of heavy equipment to secure, quarry, sort and load materials. The material is sorted by size and loaded onto pallets, in bins or in trucks for shipment to staging areas. The materials are sorted by hand or using loaders/excavators or the materials may be sorted through a grizzly or similar device. At the staging areas, the pallets or bins are loaded onto trucks for shipment. Materials that do not meet the specifications for various rock products would be left at the site and used in the reclaiming process at closure. See individual site maps in Appendix B for specific details on proposed pit locations, and stockpile, roads and other facilities at each side.

Generally, the materials to be quarried in Flathead County are rock outcrops and/or talus slopes in Belt formation and Claggett shale formation. Little potential exists to produce acid rock drainage. Rock or Stone Collection Sites.

A rock or stone collection site would be worked by laborers with hand bars and other hand tools, or with loaders, backhoes, or other similar equipment that would lift rock and stones from the ground surfaces, or from under thin soil layers, and stockpile or pallet them for removal. These kinds of operations would not generally cause continuous areas of disturbed soil nor create open pits or highwalls, but would only disturb the ground the rock had been removed from. In most rock collection sites, soil would not be salvaged, because site disturbance would be minimal, however, loss of soil by gully erosion of tracks or other careless activities would not be permitted.

Reclamation needs at rock collection sites would be evaluated on a site-specific basis. Reclamation may consist primarily of smoothing disrupted ground surfaces, replacing any topsoil that had been removed and stockpiled, seeding sites where rock has been removed, clearing rock from roads and trails to remain after quarrying, and grading excessive ruts on roads or fields that may have been caused by equipment.

3. Expected Starting Date of Operations.

Glacier Stone Supply believes the operating permit application would be reviewed, analyzed and approved in early 2017. We anticipate the permit to be amended regularly as additional sites are identified and incorporated into the permit. DEQ and Glacier Stone Supply would review the operating permit annually as part of the annual report process. The operating permit would be completely reviewed and renewed every 5 years as part of the 5-year bond review process.

4. Road Construction. Describe the types of access and quarry related roads to be built, and specify which if any roads are to remain per landowner request after quarrying is completed, their intended use, and the condition in which they will be left:

The access roads and quarry development roads are shown on the individual site maps in Appendix A. The quarry development roads that would be reclaimed at closure are also identified. These quarry development roads would change over the life of the quarry and the site maps would be updated as needed.

Some roads may have the required Mine Health and Safety Administration (MSHA) berms during operations and would be seeded for weed control during operations. The berms would be reclaimed at closure. Upon completion of quarry activity, the access roads would remain as part of the transportation plan for private property management. Some spur roads may remain for post quarrying use by the land owners.

5. Water Management. Describe 1) the source, quantity, use, and discharge of any surface water or groundwater to be used in the quarrying operation, and 2) any sediment control structure, water treatment system, drainage structure, or other water control system to be used:

Best management practices for erosion and storm water controls would be utilized, including diversion of run-on water from undisturbed ground away from the rock collection or quarry site and collection of storm water from within the disturbed areas into ponds without discharge to surface waters. No water would be used at any site except for dust control or rock drilling. All activities on Glacier Stone Supply ownership comply with state and federal laws and regulations dealing with water quality and sediment control for storm water runoff.

6. Water Protection. Operator will:

Take appropriate measures to protect surface water and groundwater from deterioration of quality and quantity that could be caused by quarrying and reclamation activities:

Glacier Stone Supply commits to this requirement. All activities on Glacier Stone Supply ownership comply with state and federal laws and regulations dealing with water quality and sediment control for stormwater runoff. If storm water could leave the site Glacier Stone Supply would obtain a storm water discharge permit.

a. Inspect and maintain all fuel storage tanks parked or set on site to prevent spillage, immediately retrieve and properly dispose of any spilled fuel or contaminated materials, and report any spill that reaches state waters or that is greater than 25 gallons to the Department:

Glacier Stone Supply commits to this requirement. Glacier Stone Supply requires all contractors to maintain hazardous materials spill kits, on site. Glacier Stone Supply complies with all federal and state laws and regulations.

b. Keep all equipment, facilities, and disturbances at least 100 feet from typical high water marks of drainage ways, except at approved crossings:

Glacier Stone Supply commits to this requirement.

7. Dust Management. Describe any dust control measures to be used during site preparation, stripping, quarrying, processing, hauling, and reclamation:

With the exception of crushed aggregate sites, dust is not anticipated to be a problem. Generally, crushed aggregate projects include, as part of the project, dust control measures including air quality permits if needed. If dust control is required, a water truck or dust suppressant would be used, as needed.

Rock Stockpiles. Operator will consolidate excess materials into stockpiles in an accessible location near an access point or incorporate them into the reclamation plan.

Glacier Stone Supply commits to this requirement.

9. Solid Waste Disposal. Operator will prohibit on site disposal of wastes unless an appropriate solid waste management system license is obtained from the Department.

Glacier Stone Supply commits to this requirement.

10. Public Safety. Describe provisions to secure hazardous features, such as highwalls, from public entry.

In the majority of cases, the access roads to each site are closed to the public by a road

closure gate. Glacier Stone Supply does not allow public access to their property. Creation of new highwalls at quarry sites could create a safety risk. In those cases, where a hazardous feature such as a tall highwall exists, it may be necessary to sign or fence the area above the site. Glacier Stone Supply commits to mitigate these potential hazardous areas during or at closure of operations in consultation with DEQ. Hazardous areas that require these measures would be listed on the individual site maps in Appendix A.

11. Socio-Economic Information.

The quarrying and rock collecting activities are distributed across two counties. The quarry sites tend to be concentrated away from population centers and provide jobs near areas experiencing growth. The quarried rock satisfies the demand for decorative rock and building stone locally and nationally.

Glacier Stone Supply has to comply with MSHA part 46 regulations regarding noise, dust, and hours of operation. To limit traffic in the quarries Glacier Stone Supply provides company transportation for the employees. This limits the number of vehicles, noise, and dust impacts that may affect adjacent landowners. However, Glacier Stone Supply would work with the adjacent landowners to adjust operations to minimize impacts.

SECTION IV – RECLAMATION PLAN

Post-Quarry Land Use. State the post-quarrying land use of the permit area.
 Structures and roads must be removed and reclaimed unless they are appropriate for the post quarrying land use:

When quarrying is complete on the Flathead County sites, the area would be reclaimed to rock habitat or development for home sites or recreational purposes. In these cases, main access roads would remain in place. Some spur roads used solely for rock removal may remain depending on the use. Most spur roads would be reclaimed. Depending on soil availability some areas would be soiled and seeded.

2. Grading. Describe the backfilling and grading plan, supported by sketch maps and drawings if appropriate, including anticipated high wall, pit floor, and waste rock dump slopes and contours, and any special reclamation features, water catchments, drainage ways, ponds, and any portion of the pit to stay open. Describe backfilling of any pits that are below the level of adjacent ground. Describe what steps will be taken to ensure that the rock face will be stable and will not present a hazard to people or livestock:

Quarries would be reclaimed by scaling back highwalls, if necessary for stability and safety. Rock highwalls would be left as rock faces blending in with the surrounding topography. If quarrying results in upslope raveling of scree or loose rock, that destabilized slope would be revegetated or otherwise stabilized. The quarry floor would be graded, covered with soil material and revegetated. All cut slopes and/or highwalls in unconsolidated materials within each permitted site would be graded/sloped to conform to the surrounding or adjacent topography. Other areas disturbed but not quarried would also be revegetated. Overburden

and waste rock, if present, would be graded to conform to natural topography, against the quarry high wall or as a mound or slope. Coarse rock would not be revegetated but would remain as a rubble or scree feature. Overburden that could support vegetation, or rock that could be covered with salvaged soil, would be revegetated. Refer to the individual site maps attached as Appendix A, for more detail. Any quarry that is below the level of the adjacent ground would be sloped to conform to the surrounding or adjacent topography during final site restoration.

- 3. Ripping, Soil Material Replacement and Revegetation. Operator will establish a vegetative cover capable of supporting the post-quarrying land use:
 - a. Describe the methods and depths of deep ripping road, stockpile, work, and other compacted areas.
 - Any compacted area(s) would be ripped to a depth of approximately 6 to 8 inches and grass seeded. We anticipate leaving all access roads in place unless otherwise stated in the individual site plan.
 - b. Describe the methods and depths of soil replacement on facility level areas and of overburden and soil replacement on quarry level areas.
 - If available, stockpiled topsoil would be respread at a depth sufficient to cover the majority of the area.
 - c. Describe the methods of seedbed preparation, including incorporation of soil amendments and mulch, if any.
 - Grass seeding would take place concurrent with resoiling efforts. Straw mulch may be used and would be considered on a site-specific basis.
 - d. Describe the methods, species and rates, and season of seeding or planting.

Resoiled sites in Flathead County would be broadcast seeded with the following:

Hard Fescue	15%	Napier Orchardgrass	10%
Timothy	15%	Canada Bluegrass	15%
Annual Ryegrass	20%	Oahe Wheatgrass	5%
Regar Bromegrass	5%	Alsike Clover	10%
Ladak Alfalfa	5%		

Lands owned by Glacier Stone Supply would be seeded with a similar mix, without clover and alfalfa.

An Application rate of 20 lbs grass seed/acre would be used. After one winter, a follow-up inspection would be made to make sure an adequate take has occurred. If necessary, a second

application would be done.

4. Weed Control. Operator will:

a. Ensure that all seed is weed free.

Glacier Stone Supply will commit to this.

b. Control noxious weeds as specified in the respective seed district management plan.

Glacier Stone Supply will commit to this.

c. Describe any planned weed control measures:

Glacier Stone Supply will comply with the appropriate county weed management plan. We will comply with the Flathead or Wheatland county noxious weed management plans.

- **5. Road Reclamation.** After road surface materials have been retrieved and properly handled, operator will downsize or completely reclaim quarry-related roads as follows:
 - a. Roads are to be graded to blend with the natural contour.

All access roads would be used for future development or recreational purposes. These would remain unreclaimed and meet "BMP" standards (self-maintaining condition). Short spur roads, needed solely for rock removal, would be recontoured and reclaimed upon completion of quarry activity.

b. Roads surfaces are to be ripped, resoiled, and seeded.

All access roads used for development or recreational purposes would remain unreclaimed and meet "BMP" standards (self-maintaining condition). Short spur roads, needed solely for rock removal, would be recontoured and reclaimed upon completion of quarry activity.

6. **Site Protection and Management.** Operator will maintain adequate site protection on seeded areas for two complete growing seasons, or until reclamation is achieved, whichever is longer.

Glacier Stone Supply commits to weed control, controlling erosion, repairing erosion rills and gullies and reseeding areas as necessary on the quarry sites.

7. Concurrent and Final Reclamation. Operator will:

a. Keep reclamation as concurrent with quarrying operations as possible.

Glacier Stone Supply would seed all soil stockpiles and road berms as they are constructed. For those sites that are inactive, the rock roads would be closed and any disturbed soil would be grass seeded in the interim period.

b. Grade, resoil, and seed or plant an area no longer needed for quarry related activities within 1 year of the cessation of such activities on that area.

Glacier Stone Supply commits to this requirement.

c. Complete final reclamation by the date given below or apply for an amendment to complete reclamation by a later date.

Glacier Stone Supply commits to this requirement.

d. Give a reasonable estimate of the month and year by which final reclamation will be completed:

Because of the nature of the many sites in the operating permit, Glacier Stone Supply commits to reclaim all disturbances within 2 years of abandonment or completion of quarrying on a site as required by the MMRA.

SECTION V - OTHER

- 1. Archaeological and Historical Values: Operator will:
 - a. Provide appropriate protection for archaeological and historical values found in the permit area.

If a site is found, Glacier Stone Supply would commit to this requirement. If a significant site is found within the rock product area and could be impacted by the specific rock product operations, the General Quarry Permit would no longer apply. Development would cease until an application for an individual site operating permit could be submitted, an environmental analysis could be completed, and mitigations developed if possible.

b. Route operations around a site of discovery, promptly notify the State Historic Preservation Office (406-444-7715), and leave the site undisturbed until proper evaluation is made.

If a site is found, Glacier Stone Supply would commit to this requirement.

2. **Personnel Informed.** Operator will inform all necessary on site personnel, including subcontractors, of the commitments made herein.

Glacier Stone Supply will commit to this requirement.

3. Additional Information. Describe any other conditions that pertain to this permit that would alter the conditions or commitments above.

No additional information.

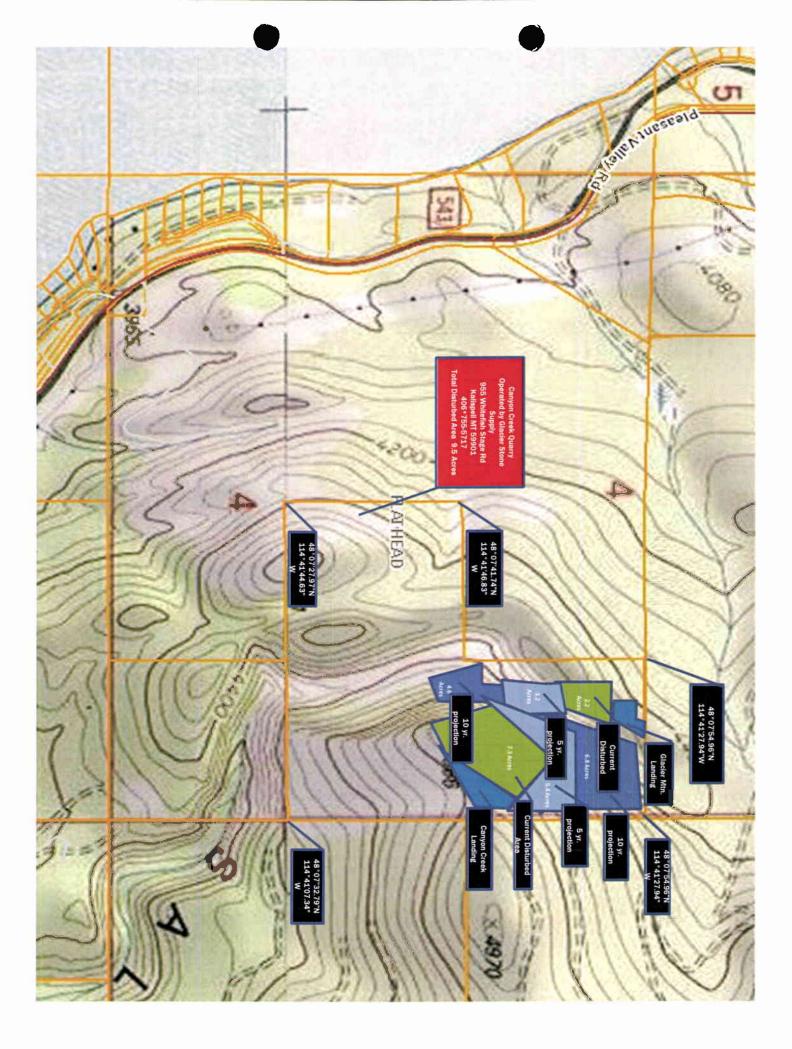
I certify that the statements and information given applies to the Glacier Stone Supply Statewide Operating Permit, and that this plan would be followed unless modified by revision or amendment as provided for in 82-4-337, MCA.

Signature

1/12/17

Date

1/12/17





ARCHITECTURAL & LANDSCAPE STONE

January 12, 2017

MT DEQ

List of Landowners within ½ mile of Canyon Creek Mining permit area.

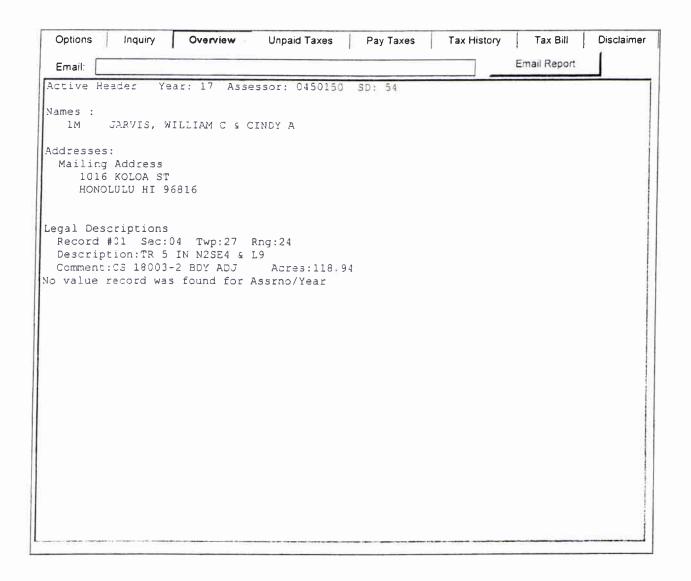
William Henry Belk III PO BOX 1328 Marion MT 59925

Diane Fullop Belk PO BOX 1328 Marion MT 59925

Weyerhaeuser 500 12th Ave @ Columbia Falls MT 59912

File Search Request Form State Historic Preservation Office 1410 8th Ave, PO Box 201202 Helena MT 59620

Contact Name:	TONY KAVA	NAGH			
Organization: (PACIEL S	TENS SULMY, C	co	Attn Damon Mur	do dmurdo@mt.gov
Address: 955	WHITEFISH	THE D		HUSPELL	do amarao e misgo.
State: M+		7,000 70		: 51901	
Telephone #: ←	06 755-5	77		DNY, KAKANGS JO	GLANEL STINE
Project Name:	CANYON	Cuer			· 如《产业》数4(#5)。
Project CAS Description:	FOR CHEN	MNE INWY			
Current Land Us	e: HARD PSO	K MINING			
Agency Involved	l (ie: Private, DN	RC,BLM): DEQ			
Land Ownership	(Private, State,	Federal, etc): FLV4	7E	JANVIS	
County: France	だらからいてはなりか かんようかんまかん	ation Information		Big Sky, Big Lan	tana
Township(N/S)	Range(E/W)	Section(s)	ALL THE RESERVE		
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TEZN, R. 24W, PM, M., FLATHEAD CO. UKKY 8/31/07 CENTIFICATE OF SURVEY NO INCO (7) 3..21.83.003 ZIGIEI 3.20.6E.0CS 7742 575 HERBIN SHEET 2 OF 2 SHEETS ZOUYGOUZEZ/A Fuent sp 00 ky: NW by CTE Data 6/31/2002 Time 1:30 pp Fauls Robinson, Plutheau courty frontoing 2 (CANTER SECTION (AS RESTED) I O SET 1/4" a 24" REMARK WITH IV4" PLASTIC CAP, STAMPED SANDS, TRIS-2 Fish Sides SECTION ENERADOWN FOR COS 14123 Fig 5/8" REBAH B) 73/3-3 S COUND NO MEETS INTER E. C. 174 CORNER [43 NOTED] TRACT 2 118.939 AC. # 346. CUN. (AS MOTED) 13001 COV'T LOF 9 39.0003368 SOUTH WEST 2633.53 2633.34 3.81.15.68N COS# 18003 FILD 5/4" HEMAN BY 7975-5 FID 5/8" HEBAR BY 7576-6 FND 5/8" REBAR br 1915-5 14153 GOV'T LOTS 9, 10, 11, 12, 13 & 14, CERTIFICATE MALE 17: 300 Subject Property (N/2 SEI/4) 5-0450150 IPLAT OF NORTH BITTERROOT LAKE, PH. III BISIEL J.ELJE.OOS OZ SIEI J. ES. OE. 00S (005 icos PNU DOW HEBAR WB3'45'50'W MANUS OF MENNING PER CUS DON W-35'53'98N SEC. 4 W 50.+0.6PS [SW[/4SE]/4] 1316.79 нём волючят 3.8US.6BN COVIT LOT 10) 1310.07 106-0011810 FOR THE P. P. P. L. L. P. L. P FRU 3" ALUSI CAP NEI/4SWI/4 NI/2SEI/4 SEI/4SWI/4 and SWI/4SEI/4 11.0 2/8" HEALH FND STE" HEBBIT (735B) 3.62.EE.COS 1305.62 COS ¥ N83.54.00"W 1572.26" 1230.83 255.301 AC. TRACT 1 7.51.15.685 (GOV'T LOT 11) (SE1/45WI/4) (NEI/45WI/4) (005 14221) PARCEL A 156.551 AC. S89'59'5 ZIUT.93' OLD BOUNDARY APPOLANA E CENTERLINE RO BOWNEVILLE THAISMISSION EASE WIT PLAT OF NORTH BITTERROOT LAKE PLEASANT VALLEY RD. 14153) [7356] 3..00.30.0CN 2 125.77" NI7'24'33"E COS TOT 107 locating the herein described Land in relation to Except to the extent a policy of title insurance is adjoining streets, natural boundanes and other. expressly modified by endorsement, if any, the land, and is not a survey of the land depicted. distances location of easements, ecreageor This map plat is being furnished as an aid in DAVE WILMS
FALL A TRUDEAU
WILLIAM C & CHEST A ARVIS A-33 3433 K 750000 L-50000 [WOOD Company does not insure dimensions. 1117.24.338 A-33'02-27 R-750.00 L-433/5 SANDS SURVEYING, INC. Ot 75 M. 65,65.69N 20 93 A-1520 30 A-25'50'00' R-550,00' L-247'93' FCC+.CIN NO3'40'00'E JOH NO 317001 WAS ITSUE 536 20.002 CALLAGE LOOP WILL JULY 2, 2007 other meters shown thereon. 86 Ht (406) 755-648! Contracte / BITTERROOT LITTLE

Report run on: January 17, 2017 12:50 PM

DEQ Montana Department of Environmental Quality

Receipts Collection Log

Log # 28055 Recor Date 01/17/17 Cast		Date 01-17-17	7 12:50 PM YE	rified User Name ES Correia, Jean	
Item Payor Name	Pmnt Type	Pmnt Num	Payment Amount	Comments	Void
1 GR KENDALL CUSTODIAL WORK TRUST	AND CK	0114	\$ 100.00	OP 00122 RENEWAL 503801/02097/116296	
2 CHILDS GEOSCIENCE INC	СК	894	\$ <u>25.00</u>	EXP 00787 2015 RENEWAL 503801/02097/116296	
** CHILDS GEOSCIENCE INC	ck	882	\$ 25.00	EXP 00787 2016 RENEWAL 503801/02097/116296	4
4 GLACIER STONE SUPPLY L	LC CK	116631	\$ 500.00	OP APPLICATION FEE 503801/02097/116296	
CI	C/MO Total Cash Total	\$ 650.00 \$.00	Grand Tot \$ 65	al 0.00	

Page 1

